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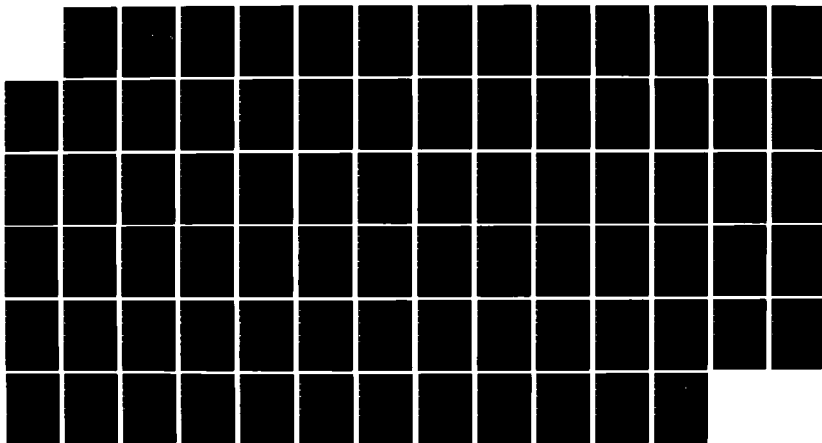
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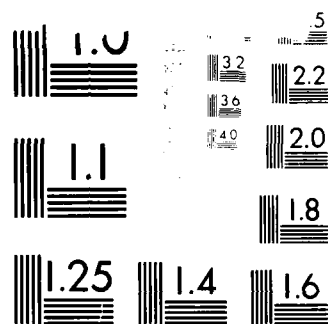
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THE CONTRIBUTION OF THE PERUVIAN
ARMED FORCES TO THE SOCIO-ECONOMIC
DEVELOPMENT OF THE COUNTRY

by

Eduardo A. Leyva

March 1986

Thesis Advisor: Richard A. McGonigal

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This role is played without neglecting their defense role and is due to the special conditions existing in the country, such that the role hardly could be performed by other public or private institutions.

This study attempts to organize cultural and military factors into a map of military entrance in social change.

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The Contribution of the Peruvian Armed Forces
to the Socio-Economic
Development of the Country

by

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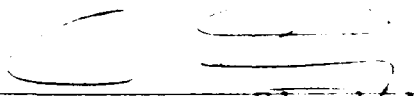
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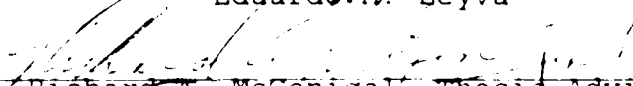
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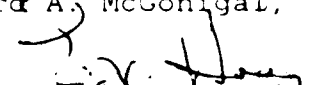
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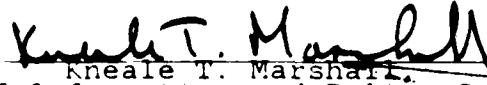

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ABSTRACT

The armed forces have been considered wasteful and non-productive institutions by many critics. Defense expenditures are viewed as a negative factor to growth in developing countries. However, given the social, political, and economic conditions in those countries the armed forces often play an important role in modernization and social change.

There appear to be three models explaining this phenomenon: the military's natural role, its direct social and economic activities, and cases of military rule.

In the case of the Peruvian Armed Forces this evolution has been played through their natural military role. Its social and economic benefits resulted from the primary mission of the military, the direct social and economic activities performed in the accomplishment of their secondary mission, and by their rule of the country.

This role is played without neglecting their defense role and is due to the special conditions existing in the country, such that the role hardly could be performed by other public or private institutions.

This study attempts to organize cultural and military factors into a map of military entrance in social change.

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I. INTRODUCTION

A nation is part of a culture having a society as a dynamic internal element. The society is composed of living elements called institutions. The culture of a nation determines the behavior of the institutions within the society, and consequently the behavior of people making up the institutions. This behavior is expressed by the action of the institutions, and can be changed or modified by action of the external environment, and/or the forces of the more dominant institutions within the society.

Among these institutions, almost every country in the world, has its defense elements to be used against external or internal enemies, which strength and composition vary according to the geopolitical and the internal situation; these elements, paramilitary or military, will be called armed forces for the purpose of this study.

The armed forces of a nation, are institutions belonging to the corresponding society where they play a role. Their actions can influence or can be influenced by actions of other of the institutions. Those actions depend on the forces coming from the external environment or from the dominant forces in the society, in a kind of interaction.

The interaction among armed forces and the other institutions is more apparent in developing countries, due to the special political, economic, and social conditions. This is the case of new Asian and African nations, and the Latin American countries, and the specific case of Peru, where historically the armed forces had and still have an active role within the Peruvian society; a role which has not been limited to the traditional defense responsibilities. This role of the armed forces can be seen under two perspectives: the activities performed in the accomplishment of its

mission given by the Constitution, and and the actions when military governments rule the country; which will be described through the following chapters of this thesis.

This study will attempt to show how those actions impact on the social and economic structure of the country, as a contribution of the armed forces, sometimes called non-productive institutions, to the social and economic development of the country. The intent will be to demonstrate the indirect benefits of military expenses into the structures of the society and in the role played for the armed forces, as social change agents.

This thesis will present the different programs and actions of armed forces of some developing countries in general, and those of the Peruvian armed forces in particular.

Chapter II . The Military Context, will describe the role of armed forces in developing countries in general, and the role, mission, and composition of the Peruvian armed forces, as well as the programs and activities performed to support the social and economic development of the country.

Chapter III. The Natural Role of the Armed Forces, will describe the contribution of the armed forces to the development of the countries, as a consequence of its primary mission. It will explain the military role in manpower and employment, education and training , modernization and social change, and regional development.

Chapter IV . The Armed Forces in direct social and economic functions, will describe the civic action programs, the provision of specialized services, and the civil defense and emergency relief programs implemented by the armed forces to contribute directly to the social and economic development of the countries.

Chapter V . The Social Changes and the Military Rule, will describe the rule of the military in developing

countries, and the social changes, specifically the major social changes occurring in Peru due to military rule. It will also compare the performance of the Peruvian regime to the performance of of military regimes that ruled in Thailand, Nigeria, Burma, Indonesia, and Egypt.

Chapter VI. Analysis. An analysis will be made about the performance of the Peruvian Armed Forces in contributing to the social and economic development of the country, playing a role of social change agencies.

Chapter VII. Conclusion. General conclusions will be stated about the performance of the Peruvian Armed Forces in their socio-economic role.

II. THE MILITARY CONTEXT

A. THE GENERAL CONTEXT

Almost every country in the world has a military or a paramilitary force as its defense element to be used against external or internal enemies and to defend its sovereignty and integrity. These defense elements are parts or institutions of the societies of the countries, where they play a role. Their emphasis is determined by the geopolitical and external situation (the environment), and the internal situation is determined by the social, political, and economic conditions, and by the interface with other institutions.

The first factor, defines the strength of the armed forces relative to the external threats and the national goals. This in turn affects the social, economic, and political structures of the society. The geopolitical situation is obviously different for different countries. This can be observed by analyzing various national scenarios. For example:

Mexico, a big country, does not need a large and powerful army. It has not had internal and external threats in the last forty years. To the north it has a natural defense in the United States, and to the south none of its neighbors seem to be a current a threat. On the other hand, Israel, a small country, has a permanent, maximum level of external threat coming from its neighbors, and internal threat coming from terrorism. This illustrates the case of the vital need to have a strong army for the survival of the country. Evidently, the emphasis of the military in Israel is greater than in Mexico. It also can be seen in economic terms where, according to the data extracted from the Military Balance of the International Institute of Strategic Studies, the defense expenditure for Israel is \$4,270

million for 4 million people against \$530 million for 64 million people in Mexico.

The second factor: the internal social, economic, and politic situation, is closely related to the terms "developed" and "undeveloped" countries. In the case of developed countries, the main characteristics are stability, modernity, and military subordination to the civilian authorities. The military leaders have some influence in defense and foreign affairs, but almost no influence on internal affairs. These countries are already modern with respect to the influence of the military. Edward Shils [Ref. 1: p. 8] states that, "The older better established states of the west and the communist states, disclose a rather different relationship between the military and the civil sector of the society. In most of these countries, the military has considerable influence over foreign and defense policy, but it plays little part in domestic policy or its administration."

In respect to stability, Kennedy [Ref. 2: p. 55] points out that, in a developed society the pluralistic conflicts are constrained, and within limits, reinforce the stability of the society. In the developing world the pluralistic conflicts are fractionalizing and keep the state off balance.

In the developing countries, the characteristics are conflicts, instability, transition to modernization, and influence and participation in politics by the military. These are not yet modern states.

Modernization is the major factor concerning the public life of developing countries, all the institutions of the society orient their actions to modernity. Among those institutions are the armed forces. Shils [Ref. 1: p. 8] states that, "The ascendancy of the military in the domestic life of these states has been a response to the difficulties the new states have encountered in their efforts to establish themselves as modern sovereignties."

This ascendancy of the military in every country corresponds to the particular situation and existing conditions in the society. The role they play is conditioned by their involvement in the internal and external affairs of the society.

B. THE MILITARY IN DEVELOPING COUNTRIES

As for developing countries, authors and theorists have included the Asian and African countries that became independent after WWII, some Asian and African states which enjoyed sovereignty for a long time such as Iran, Afghanistan, Ethiopia, and Thailand, and all the Latin American countries. These countries are considered to be not yet developed.

One of the main characteristics of developing countries is the involvement of the armed forces in both the internal and external affairs, specially in politics, playing an important role in the societies. The case of the new Asian and African states will be taken as a model to explain, in general, the possible causes and origins of the behavior and role of the armed forces of developing countries.

In the new Asian and African states, the conditions existing at the beginning of independence were those that normally exist where some form of political revolution has taken place. These countries became sovereign after being colonies for a long time. New elites and leaders appeared; struggling for power allocation within the societies. As in any other country the new leaders were concerned with the modernization of their countries, as a means to establish national identity and sovereignty. Referring to national identity, Whynes [Ref. 3: p. 30] states that, "The creation of an army is one of the primary manifestations of the independence of a new nation." Gutteridge [Ref. 4: p. 58] points out that an effective army and eventually a navy and air force, may be one way of creating a national and

international image of a modern state. As a consequence, in a disorganized society, the armed forces became one of the most or the most organized institutions, and most of the scarce resources were allocated for defense expenditures.

In this context, the armed forces emerged as social and political institutions of prime importance, taking a preferential place within the societies, due to its early identification with the national cause and the rough way toward modernization.

Among the elites of the new states, [Ref. 1: p. 9] to be modern means to be dynamic, concerned with the people, democratic and egalitarian, economically advanced, sovereign and influential, and scientific. To be scientific is related directly with technology, and scientific knowledge. Many authors agree that the armed forces are the primary recipients of technology. They assert that there are two major channels: the organization, and the equipment. First, the organization is similar or a copy of that of the industrialized or developed countries, and second the equipment or armament is similar to that used in those countries.

With respect to organization in these new Asian and African states, Lucian Pye [Ref. 5: p. 76] states that, "In practically all of the new countries they have taken the WWII type of army model. In so doing, they have undertaken a form of organization that is typical of and peculiar to the most highly industrialized civilization yet known. Indeed modern armies are essentially industrial type entities. Thus the armies of the new countries are instilled with the spirit of rapid technological development."

With respect to equipment and armament the armies of the new countries operate and maintain supersonic jets, missiles, radars, and electronic material; sometimes the same used by the nations that produce that armament. To operate and maintain that equipment requires highly trained

and skilled personnel. Some of these are trained in foreign countries, and others at home by foreign advisers. As a consequence, military men acquire technical knowledge, establish relations with people and institutions from more advanced environments, and compare the reality of their country with the reality of a modern country [Ref. 5: p. 78]. The revolution in military technology has caused the military leaders of the newly emergent countries to be extremely sensitive to the extent to which their countries are economically and technologically underdeveloped. Called upon to perform roles basic to advanced societies, the more politically conscious officers can hardly avoid being aware of the need for substantial changes in their own societies. This concern with the need for change in the societies, and the preferred place the armed forces have in its societies, have developed in the military an orientation to sociopolitical changes, expanding the main role they had at the beginning of the nation building : to preserve and make visible the national sovereignty, by acquiring a critical role in the internal affairs of the country.

The involvement of armed forces in internal affairs can be expressed in the form of influence, participation, or control of the political context. The influence is exercised when the military acts as one of the most powerful institutions of the society. Participation is when the armed forces are active political decider, as in the case of vetoes against certain candidates or parties, or the extreme case of the overthrow of elected authorities. Control of political context is evident in the case of military governments, when the armed forces are the foundation of the political power. The involvement of the military in politics varies with the level of political stability, and the attitudes of the military toward the civilian authorities. Once involved in politics, the military leaders are conscious of

social and political changes and exert their influence, participation or control to introduce planned social changes to transform the structures of the society, expanding their role to social change agents. Referring to the Egyptian military, Berger [Ref. 6: p. 29], states that "Seizing the power in 1952, a group of them introduced a new period of conscious, deliberate, planned modernization, in all realms of Egyptian life; having changed, the officers now proposed to change Egypt."

There is still another aspect of the military establishment that conditions its political behavior. [Ref. 7: p. 151]. Even where armies are limited in their political role, they have economic and social functions which influence political change. The armed forces play the role of agents of social change accomplishing these social and economic functions, by the direct effect of its natural role or contribution to the economic and social development of the country, or by performing specific activities such as implementing civic action programs, or providing specialized services oriented to the development of the country. In the long process to modernization, it is evident that there is expansion of the role of the military from the exclusive and traditional defense role to the social change agent role, under the social, political and economic considerations stated above.

In the Latin American countries, the armed forces have played a similar role to that of the armed forces of the new Asian and African states, with a significant difference in time. In more than a century of independent life, militarism, coups de etat, and military rule have been the prevailing patterns of the armed forces since their independence in the early 1800's. In general, the Latin American armed forces were conservative, and they accepted and maintained the status quo. Professionalism was determinant in

this behavior. Since the independence, professionalization was limited to the pure military sciences oriented to the use of the armed forces as an instrument of foreign policy and external defense. In the early 1960's, a new professionalism appeared, the military began to be concerned with internal security, and national development. Stepan [Ref. 8: p. 246] explains the origin of the new professionalism: In reality, by the late 1950's and early 1960's, the success of revolutionary warfare techniques against conventional armies in China, Indochina, Algeria, and Cuba led the conventional armies in both developed and undeveloped worlds to turn more attention to diverting military and political strategies to combat or prevent domestic revolutionary warfare.

Faced with similar conditions in their countries, the Cuban case was the best example for the Latin American armed forces. The new professionalism developed an expansion role for military doctrines in counterinsurgency, civic action and nation building. With this expansion, new programs were implemented.

C. ROLE AND MISSION OF THE PERUVIAN ARMED FORCES

The Peruvian armed forces since independence in 1821 to the late 1950's, were the supporters of the oligarchy and other dominant classes. They accepted and maintained the status quo. There were more than fifty military interventions in 140 years of independent life, but no sociopolitical changes were introduced. However, in the early 1960's, the military became conscious of the national reality, changing their attitude toward the dominant classes when the concepts of internal security and national development were included in the professionalism of the armed forces.

Paramount in the development of the armed forces during the 1950's and 1960's were the changing attitudes of the

officer corps. An important factor in changing attitudes was the exposure to social, political, and economic ideas discussed at the Center of Higher Military Studies(Centro de Altos Estudios Militares-CAEM) [Ref. 9: p. 221].

The CAEM was established in 1950 to teach joint staff courses to the military in the rank of colonel, as well as selected civilian professionals. Since its beginning, social, economic, and political subjects were included in the curricula of the National Defense Course. CAEM studies in the late 1950's and early 1960's, diagnosed a number of problems in the Peruvian Society. The military concluded from their studies that Peru was in a state of latent insurgency, which could only be corrected in their view, by a general policy of economic and social development. [Ref. 8: p. 254]

The new professionalism of the Peruvian military, expanded its role in the Peruvian society. In 1960, they began to participate directly in social and economic activities. They implemented civic action programs, and performed specialized functions oriented specifically to the national development.

Other aspects of the role of the Peruvian armed forces after 1960, were the reforms and changes introduced by the Military Government of the Armed Forces. In 1968 a military institutional intervention seized power to make a revolution and changed the Peruvian society. The military introduced radical and deep changes in the structure of the institutions of the society. They play a direct role as social change agents as a means to bring about national development and social justice. In 1980 a new democratic government was elected and the military returned to their barracks.

The change of attitudes, and the new professionalization of the Peruvian military after 1960 were the main factors which caused the role expansion of the armed forces, serving

only a defense function, to becoming social change agents. Since that time the armed forces participate actively and directly performing their natural role, implementing civic action programs, performing specialized activities to provide public services, and making social changes when ruling the country.

Consequently, with the social changes taking place and the process to modernization of the Peruvian society, the Constituent Assembly of 1979 included social economic functions for the armed forces in addition to its primary defense functions. Article 275 of the Constitution of 1979 [Ref. 10], establishes that the Peruvian armed forces are made up of the Army, Navy, and Air Force, and their primary mission is to guarantee the independence, sovereignty, and integrity of the Republic's territory; and Article 280 states that the Armed Forces and Police Forces should participate in the social and economic development of the country, and in civil defense.

To accomplish their primary mission, the armed forces are constituted and trained for the external and internal defense. They play a natural social-economic role, as a positive effect of the presence of the armed forces, and the defense expenditures; providing employment, education and training, integrating people and regions, creating a sense of national identity, providing infrastructure, and incentives for the economy and regional development.

To accomplish the second part of their mission, the armed forces have developed several initiatives. Among these are implementation of civic action programs, provision of specialized public services, and implementation of civil defense and emergency relief programs.

The natural role functions, civic action programs and specialized functions will be explained in detail in Chapters III and IV. The the direct role of social change

agents will be explained in in Chapter V. Finally, analysis and conclusions about the performance of the Peruvian armed forces will be addressed in Chapters VI and VII respectively.

III. THE NATURAL ROLE OF THE ARMED FORCES

A. GENERALS

The armed forces play a natural role in societies by contributing to the social and economic development of the countries. This is accomplished through the positive effect of their presence in the societies, and the strictly military activities performed to accomplish their prime mission: to provide for the external and internal security of the countries.

This natural role is independent of whether or not the military are involved in politics, or the level of involvement in internal or administrative affairs. It is expressed by the positive effects of the existence of the armed forces, and the benefits of the military undertakings. In other words the contribution of the armed forces to the social economic development of the nations is a result of their strictly military functions.

Sometimes, these functions are misunderstood and viewed as civic action programs or activities. But there is a significant difference: the social economic contribution result when military activities meet military or defense goals. Civic actions, on the other hand, which have social and economic effects, too, include the deliberate use of the armed forces to meet civil or development goals, exclusive of or in addition to, normal military activity.

The economic and social functions of the armed forces when playing their natural role is seen in terms of manpower and employment, education and training, modernization and social changes, and regional development.

B. MANPOWER AND EMPLOYMENT

The man is the indispensable component of the armed forces, representing the basic resource to form and maintain the defense of the country. Manpower is a permanent demand of the military. This demand makes the armed forces become a natural source of employment which absorbs a percentage of the population to meet their manpower requirements. In the labor market the military services are one of the many employment opportunities for people starting or continuing a career. For beginners, the Officer academies, NCO schools and enlisted programs are the gates to enter military life and have employment after graduation training programs. For people who are already professionals there are direct commission programs for a military career, and positions as civilian employees. The opportunity for civilian positions includes some for non professional people having a technical or administrative specialty. All these people can join the military for vocational or occupational reasons.

In developing countries this natural role is more evident. Serious social economic problems generate high rates of unemployment, low salaries, and unstable jobs. Consequently, people tend to look for stable jobs with secure salaries. In this environment the armed forces represent the source of these kind of jobs. Gutteridge [Ref. 4: pp. 75-76], points out this aspect when he refers to a study by Boyd and French in Ghana. A soldier's life is regarded as providing steady employment in a society in which it is not easily obtained, and a standard of living above the average, along with the possibility of a future position of responsibility, if only as the licensee of a petrol station, after a career of moderate distinction in the ranks.

According to the International Institute of Strategic Studies the manpower of the Peruvian armed forces is 135,000 men, 75,000 for the army, 20,000 for the navy, and 40,000

for the air force. These people come from a population of 19,800,000. The military thus absorb 0.61 per cent of the population.

Many people join the armed forces every year for a military or or civilian career in order to achieve vocational or occupational goals. They get into the Peruvian armed forces through the following gates: the officer academies, the officer assimilation programs, the NCO schools or institutes, the recruitment programs, and the vacancy of civilian positions. Women are not considered to be in active service.

The three services have their independent officer academies. Annually, young men between the ages of 16 to 20 are accepted as cadets. After five years of education and training they graduate as second lieutenant or equivalent, to begin a professional military career.

The officer assimilation programs, are to meet the needs of the services for certain professional specialties such as doctors, engineers, lawyers, chaplains, etc. Civilians who are professionals can get direct commissions in the condition of "assimilated" officers after a basic military training and indoctrination period. They are commissioned in the rank of captain and below. These officers are assigned on the basis of qualification and experience. After two years as assimilated officers, they become "effective" officers, the same condition as those graduated from the academies.

The armed forces NCO schools and institutes accept young men between ages of 16 and 21. These young men graduate after three years of education and training as sub-officers.

The recruitment programs are based on the law of "Military Obligatory Service". Conscripts and volunteers are recruited. According to the law all the Peruvians at age 17 years old are eligible for the military service for a two year period. Those who are not selected or not in that age

span can apply to serve as volunteers. Women are selected only for the reserve. After completing two years in the active service, soldiers, sailors, and airmen can apply for reenlistment every two years.

The vacancy of civilian positions is based on the needs of the services. Civilian men and women already qualified in a profession or specialty are accepted to occupy positions at professional, technical, or service levels.

By providing these employment opportunities, the Peruvian armed forces contribute to the social economic development of the country, as a natural source of employment in a society with a high labour surplus.

C. EDUCATION AND TRAINING

The armed forces of any country have excellent training and educational facilities. Anyone who enters the services will be subject to a variety of forms of education and training, whose nature varies with the levels of the military hierarchy and the specialty. These range from fundamental literacy to advanced courses in a permanent and continuous process during one's military career.

Janowitz [Ref. 7: p. 157] states that, "There can be no doubt that the military has the capacity for education in fundamental literacy and in aspects of citizenship training. The military when it is not engaged in combat is a training apparatus whose personnel spend considerable time teaching or being taught. The profession views teaching as an essential qualification for a military leader. In short, every effective soldier by his very task, must be a teacher."

Education is a permanent process that covers all levels and stages of the military life. Cadets are educated to become officers, enlisted to become NCO's, recruits to become soldiers, officers and NCO's for postgraduate qualification. The beginners at all levels are converted from civilian to military. Moral values and military virtues

such as patriotism, dignity, honesty, honesty, discipline, obedience, sacrifice, and spirit de corps, are taught as the foundation of the military career. This kind of education is rarely given in civilian institutions.

Training is also a continuing process. Specialization for military and civilian personnel is given by means of regular courses or on the job training. Preparedness and readiness of the forces are the outcomes of a permanent process of training.

The natural role of the military in education and training, also has an economic benefit. Soldiers, NCO's, and officers leaving the service have preparation which could be of potential use in the civilian economy. Benoit [Ref. 11: p. 17], points out that the defense programs make some contribution to the civilian economies of the developing countries. He says that defense programs directly contribute various useful inputs into LDC (Less developed countries) economies, particularly in manpower training which may improve considerably the productivity of military manpower for civilian occupations after demobilization.

In addition, Daalder [Ref. 12: p.19], states that, "Conscription has a multiplier effect. Ex-soldiers who return to their local communities may often act there as innovators. They may help to spread skills (what they learned in the service). They often increase the desire of self education amongst their neighbors. Thus, they can help to translate national planning intentions into local realities."

At the professional level, [Ref. 9: p. 229], Peru has developed one of the most comprehensive military training systems in Latin America. The Army's Military Academy--present day capacity about 1,000 cadets--has been providing a university level education since 1896. The Navy and the Air Force developed similar academies for smaller numbers of midshipmen and cadets.

The advanced education centers are: the Superior War College (Army), the Naval War College (Navy), and the Air War College (Air Force). In these superior centers are given basic courses for lieutenants and captains, command and staff courses for majors and lieutenant colonels, and high command courses for full colonels and generals. The highest officer school is the "Center of Higher Military Studies" (Centro de Altos Estudios Militares-CAEM), a joint school sponsored by the Joint Command of the Armed Forces, the highest joint command. Founded in 1950 this school gives the "National Defense Course" for selected colonels of the three services and police, and selected civilian professionals from public and private organizations; the curriculum of the course includes political, social, and economic subjects, and the national problems are analyzed.

The NCO schools provide education at mid-level technical and administrative specialties. Alumni graduate after three years of receiving basic military training, general courses and specialized courses. Postgraduate technical and administrative courses for sub-officers are given at the separate Technical Training centers of each service.

For soldiers, sailors, and airmen, the education and training programs include basic military training and specialization at periods. After, that on the job training is a permanent process during the two years of military service.

Independently, the armed forces have special programs for the illiterate and elementary education of soldiers. For instance, the Air Force has agreements with the authorities of the Ministry of Education at local levels, to give courses of fundamental literacy, and elementary school for airmen at the air force bases. The ministry provides the teachers, and the air force the classrooms and material. In some units similar courses are prepared by air force

officers to be given after duty hours by military instructors to airmen who do not attend the public schools. For those who were studying in elementary and high schools before they got into the service, or those who want to study while in the service, they are authorized to attend their education centers, after duty hours.

D. MODERNIZATION AND SOCIAL CHANGES

The armed forces play an active natural role in modernization and social change, by means of their recruitment programs, and the deployment and settlement of military units.

In the first place, the recruitment programs play an important role, especially in developing countries where the majority of the recruits come from the lowest social classes. The armies convert raw recruits into citizens whose whole pattern of life pattern of life is changed by military discipline, training and interaction with different people. Benoit, [Ref. 11: p. 176], explains this role: ". . . to take the poor farmer from an inward looking static community, to move him to a new setting and to train him with people from other villages and other parts of the nation, to involve him with national and international issues, to give him an entire new set of skills--and show him that he can acquire new skills--to force him into patterns of discipline following orders exactly to give him a notion of the importance of time and punctuality, etc., must have a profoundly modifying and modernizing effects."

Second, the strategic deployment of the armed forces has a direct effect and influence in modernization and social change in the communities, villages, and settlements. This is especially true in countries with a very low degree of geographic mobility, whose military units become agencies for national identity and modernization for neglected outlying areas.

Military units seek settle in remote and isolated areas, where they are the only representative of the government. They personify the nationhood, insure the presence of the national flag, represent the authority and the law, and become the link with the rest of the nation. In addition, the interaction between the military and the local community accelerates the process of acculturation and integration to the society. Bienen, [Ref. 13: p. 25], points out this role of the armed forces when he discusses the Turkish army, "The military became a major agency of social change as it spreads new skills, machines, and concepts into the hinterland. Individuals who led the army, recruits, as well as officers, became the driving force for technical and social innovation in the villages."

In Peru, the armed forces play this natural role, by means of the recruitment programs, and through the deployment of military units for defense purposes.

In the first case, in converting raw recruits into military, the armed forces integrate people from different races, customs, religions, and languages, into one organization (army, navy, or air force). They inculcate them the moral values and military, unify their concepts and customs, and make them think as Peruvians. The majority of those recruits come from the lowest social classes of urban and rural communities of the Costa, Sierra, and Selva. These are the three natural geographic regions of the country, where climate, terrain, and population are different for each region.

Recruitment programs for officers and NCO's, is also important in social mobility. In a country with a highly stratified society, according to race, area, caste, and economic power, the armed forces become major ladders for social mobility.

In the second case, the settlement of military units for defense purposes, the Peruvian armed forces play an active role interacting with the local communities, and integrating remote and isolated regions into the rest of the country. Peru is a country with a diverse territory. This causes transportation to be difficult and causes some towns, villages, and settlements in the interior, and especially those located along the boundaries of the country, to remain isolated. The settlement of military units in those regions means the reinforcement of the nationhood, the permanent presence of the Peruvian flag, personification of the law and the authority, the link with civilization, the basic public services, and the presence of a vehicle useful to modernization and acculturation.

E. REGIONAL DEVELOPMENT

Under the pure economic point of view, Whynes [Ref. 3: p. 50], states that, "In keeping with any other form of economic structure a military establishment be it industry, barracks, or base, does not exist or operate in isolation. Feedback between itself and the surrounding economic environment will occur, and a natural relationship can be established based upon supply and demand."

The military installation's demands for labor, goods, and services, are supplied by the civilian community. The civilian's demands for basic public services such as communication, transportation, and health, are provided by the military. The demand of the military for goods and services has social and economic effects. In order to meet this demand the community has to be modernized and developed. Stores, houses, amusement centers, hospitals, schools, banks, professional services and technical services are needed, as well as the provision of utilities for the military installation.

The extreme case occurs when a new military installation is established. New civilian communities are formed near them to supply the needs of the military and to receive the basic public services they could provide.

The same effects of this natural role of the armed forces occurs in Peru. The demand of military units motivates the development of the different regions. Demand and supply of labor, goods, and services are evident at local and regional levels when the facilities available on base do not satisfy the needs of the unit and its personnel. Professionals and technicians from the civilian communities are hired, military people live off base, and goods and services are purchased in the local and regional markets. In the reverse case, civilian communities were formed as a consequence of the presence of military units due to the availability of basic public services in isolated regions, and the possibility of providing goods and services for the military population.

IV. THE ARMED FORCES IN DIRECT SOCIAL AND ECONOMIC FUNCTIONS

In the role of a change agency the armed forces contribute directly to the social and economic development of countries by performing non-military or dual functions to meet civilian goals. These activities are separate from the social and economic indirect functions performed in the accomplishment of their primary mission, and independent of their involvement in politics. These functions are performed through the implementation of civic action programs, the provision of specialized services, and the implementation of civil defense and emergency programs. In these functions the defense resources are deliberately used to obtain direct social and economic benefits without any neglect of the primary mission of the armed forces.

Concepts of this role of the armed forces have been analyzed by theorists such as Benoit and Hanning. Even though they use different terms they agree on the positive effects or benefits. Benoit uses "the favorable effect of defense spending on growth" in his general analysis, where, in addition to the natural role and civic action concepts, he includes concepts of civil defense and specialized services. The military contribution to civilian relief and rehabilitation after natural disasters may be quite important in LDC's (Less Developing Countries). Its mapping, hydrological, meteorological, and other R&D is usually more important than the work done by civilian agencies in these fields [Ref. 11: p. 17].

Hanning uses the term "the peaceful use of the armed forces (PUMF)", which includes civic action, specialized services, and civil defense concepts. The primary purpose of military forces must be recognized as being to provide external and internal security of their countries. However,

in a world of sizable standing military forces, the concept of the supplementary peaceful use of such forces along constructive lines of benefit to the community at large deserves explanation and definition. Indeed, in many countries, such use is an integral part of attaining national security and not a pure supplement. There are skills required in modern military structures that are capable of being used for non-military purposes, skills that in some areas of the world are in short supply. Probably in every country, such peaceful use of military forces (PUMF) are conducted in a variety of forms by ground, naval, and air forces. [Ref. 14: p. xvii]

Let us examine the direct role of the armed forces in the social and economic development of the countries, when performing specific dual or non military functions under the aspects of civic action, specialized services, and civil defense and emergency relief.

A. CIVIC ACTION

The term civic action has been used with emphasis since the early 1960's. In 1959, the congress of the United States amended the Mutual Security Act to provide specific legislative endorsement to civic action. Later in 1961 president Kennedy directed the Departments of State and Defense to expand the support of civic action in developing countries.

One of the major reasons to stress the support of civic action programs was insurgency. Civic action was seen as a tool to eliminate or reduce the causes of economic and social discontent, the main source of insurgency, by using the armed forces in specific non-military uses. Civic action was defined [Ref. 13: p. 25] as the use of indigenous foreign military and paramilitary forces in projects useful to local population, in fields such as education, public works, agriculture, transportation, and other projects which contribute to social and economic development.

Whynes [Ref. 3: p. 159], defines civic action under the economic point of view, as in the case where the military provides deliberate benefits to the civil economy by acting in a non-military manner.

Whatever the source of the definition, the point is that the armed forces perform specific non-military tasks to meet civilian goals and contribute to the development of the countries, independently of whether or not military rule exists, and the level of involvement of the military in politics. Expressions of civic action programs have been observed in many countries [Ref. 13: p. 113]. The military in Burma participate in a variant of civic action activities through the Defense Service Resettlement Program, which provides for the resettlement of retired servicemen in a group of modern villages in a highland area 300 miles northeast of Rangoon. A central administrative village, directed by an army officer, serves to coordinate administrative services to the various villages in the settlement and provide a central market, seed farms, a tractor station, a hospital, and other public services. These type of civic action program have also been used very widely in communist regimes. ...The Chinese Red Army units grow their own food-stuffs and work in irrigation and other projects. They help with the harvest, and particularly in recent years, they often spend more time in productive labor than in field training.

In Peru, the armed forces were performing these activities as independent military programs, until [Ref. 15: p. 159] all the three services responded to president Belaunde later in 1963 when he announced "Cooperacion Popular", a Peruvian "war on poverty" that included a central civic action role for the military. Since that time, with some variations, the armed forces have been working in civic action programs at the national regional or local levels.

1. The National Programs

a. The Road Development Program

An army program which is based on a former plan implemented since 1963 and an agreement with the Ministry of Transportation and Communications signed in 1975. According to this agreement, the army has the following tasks:

1. Construction of roads in hard geographic areas, having high cost.
2. Construction, improvement, and maintenance of strategic roads.
3. Construction of roads devoted to the development and integration of the Amazonas basin.
4. Construction of short length roads in critical zones, and roads to be used in case of emergency.
5. Maintenance of nonfinished roads constructed by the army.

The projects are developed by engineering units of the army, 26 have been already completed, and at the present time 20 are in development. 5 are in the Costa region, 5 in the Sierra region 10 in the Selva region. Figure 1 shows the location of the road construction projects.

b. The Rural Settlement Program

An army program, which is performed in coordination with the Bureau of National Development, based on a former army program, recognized as a major program in 1975. The objectives of the program are:

1. To reinforce the national sovereignty and security in the borders of the Peruvian jungle.
2. To establish, reinforce, and consolidate the organized settlement creating the conditions to attract the concentration of disperse populations in rural areas.
3. To promote the integration of the territories of the borders of the Peruvian jungle to the regional and national economic life.
4. To create new areas of production.
5. To incorporate the native indian tribes of the jungle to acclimate to the national culture.
6. To create sources of employment, and organize the use of land.
7. To increase the income level of the rural population.

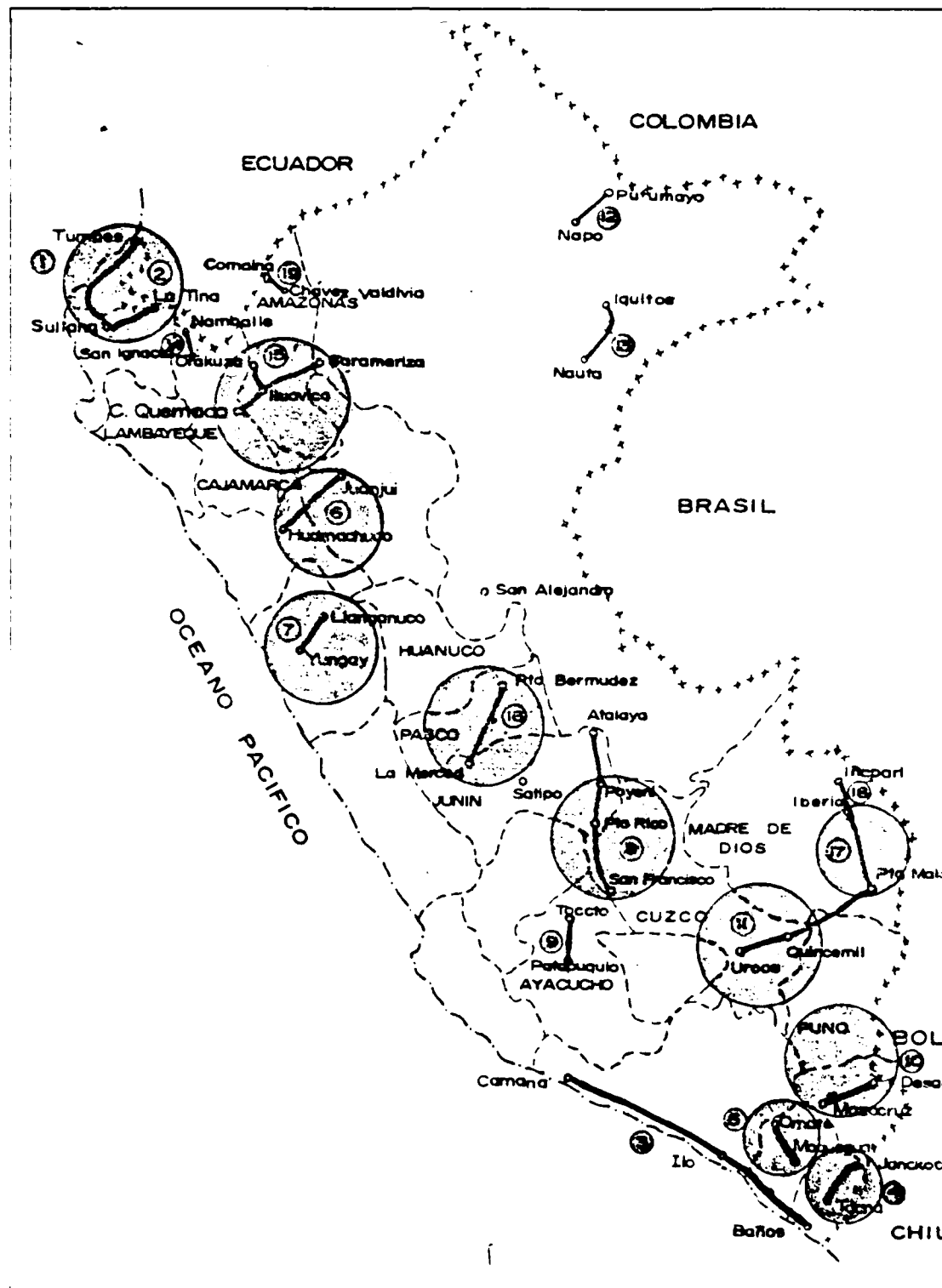


Figure 4.1 Road Construction Projects.

8. To organize a structure of technical, economic, and social support in order to promote the improvement of living conditions of rural population.
9. To establish a transportation and communications system, tending to integrate the areas of the projects to their corresponding region.

The projects are executed by specialized army units called Military Units of Rural Settlement, which are working in seven projects located in the regions of Chavez Valdivia, Chiangos, Angamos, Cantagallo, Breu, Esperanza, and Tahuamanu. The goal of these projects are to bring 1.39 million hectares of soil to crop production, consolidate the settlement of 10,000 rural families, and improve the level of education, health, feeding, and housing services for those families. Figure 2 shows the location of the settlements.

c. The Riverine Civic Action Program

A Navy program executed to benefit Amazonas basin development. It is performed by the Naval Force of the Amazonas, which operates its river ships mainly as floating dispensaries. Those riverships navigate along the rivers Ucayali, Napo, Yavari, and Putumayo, all tributaries of the Amazonas, carrying civilian and military medical and dental personnel, medicines, civilian personnel from government agencies and public enterprises, and supply material for those agencies and enterprises. Figure 3 shows the rivers included in the program.

The services provided consist of medical and dental assistance and evacuation, teaching and technical support for: education, agriculture, housing, hygiene and prophylactics, and birth control; and delivery of supply for public agencies stationed in the region. The services are programmed according to the needs requested through and established by the Regional Committee of Coordination in Iquitos, the largest city of the Peruvian jungle. This committee is composed of representatives of government

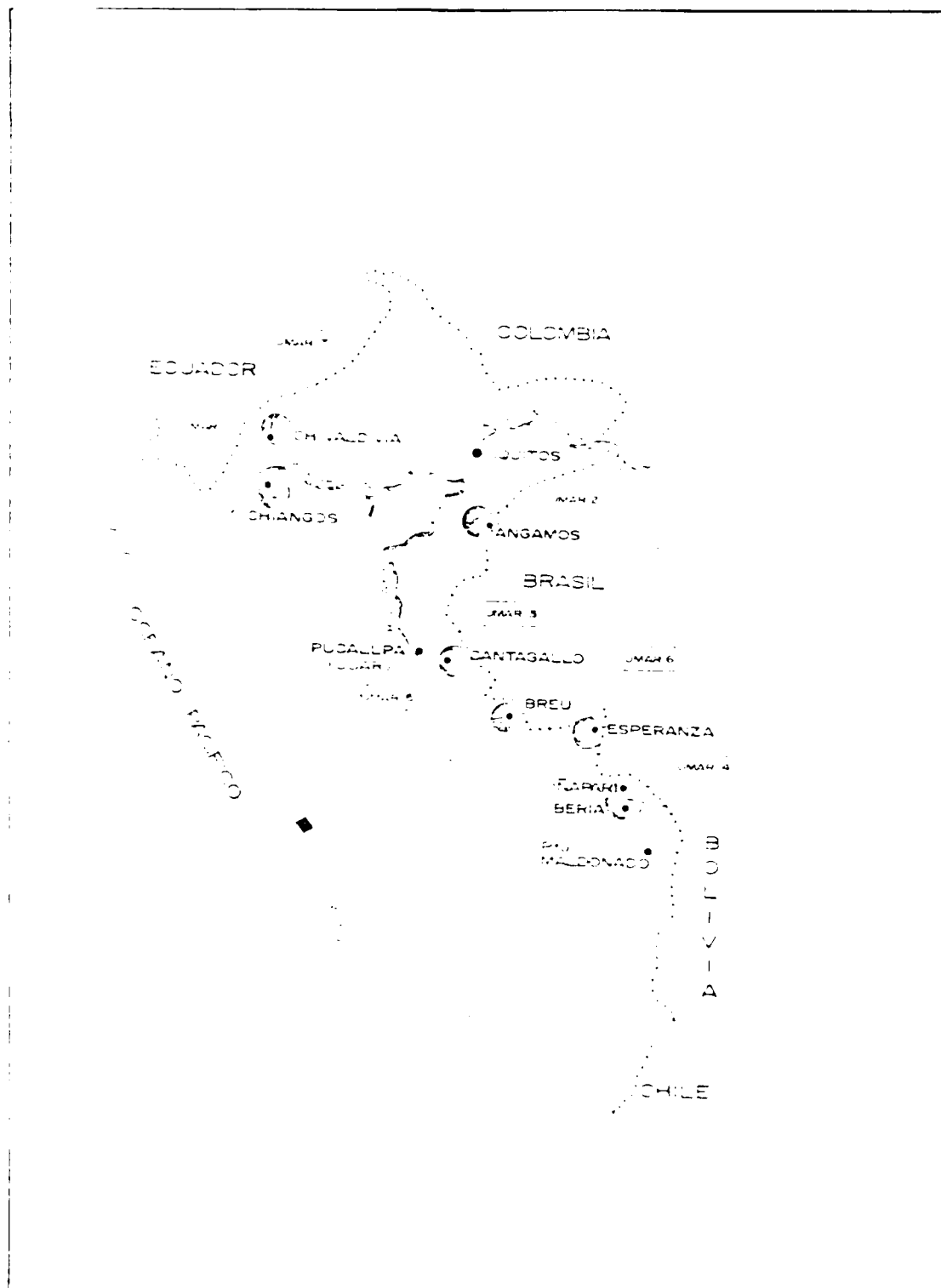


Figure 4.2 Rural Settlement Projects.

agencies, public institutions, local authorities, and the navy. The travel of the ships are programmed annually and last an average of 35 days. In the case of the trip to the Putumayo river, a natural boundary between Peru and Colombia, the medical services are provided to the population of both shores according with an agreement of the two governments signed in 1970. The Colombian navy provides similar services in its area of opportunity.

d. The Air Transportation Program:

An Air Force program executed by the 3rd Air Group, the 8th Air Group, and the 42nd Air Group, the former a helicopter unit, and the other two airlift units. These units fly across and along the country transporting passengers and cargo, covering pre-established routes or itineraries.

The objectives of this program are: to provide air transportation to and between places where transportation means are scarce, to integrate isolated populations with the rest of the country and to have a link between production centers and markets.

The itineraries are covered by the 8th Air Group, and the 42th Air Group. The first one operates from its base in Lima covering pre-established routes from the Costa to the Sierra and Selva. Figure 4 shows the detail of the routes.

The 42th Air Group operates airplanes and seaplanes from its base in Iquitos. It covers pre-established routes along and across the Peruvian jungle. The detail of the routes is showed in Figure 5.

The air force provided these flights as service programs until 1964, when they were officialized as civic action programs. Besides the itineraries, the three air force groups are concerned with the transportation of personnel, material, and equipment, whenever needed, to

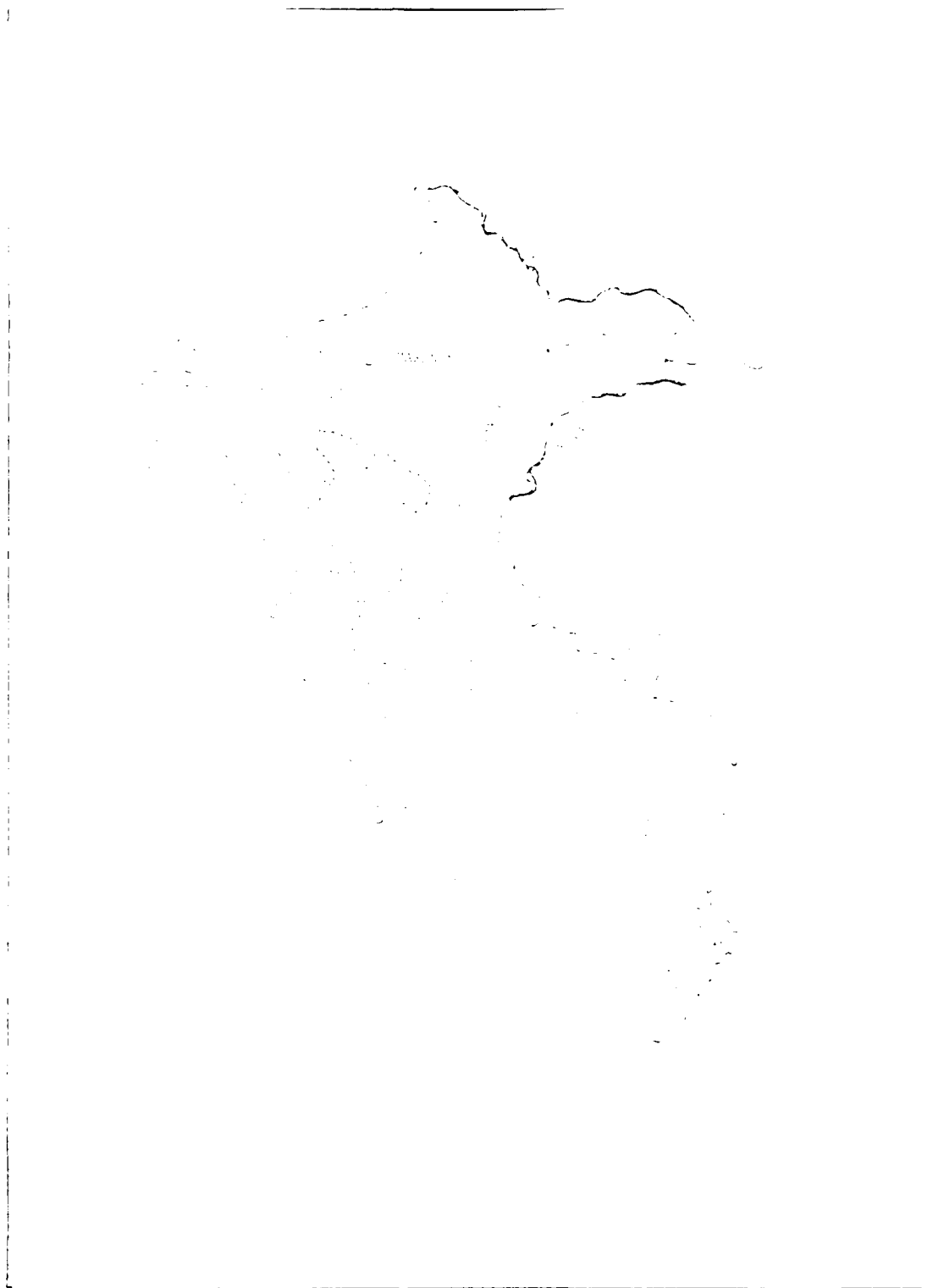


Figure 4.3 Riverine Civic Action Program.

support the development programs of the government, projects of government agencies, and public institutions.

2. Regional and Local programs

In addition to the major national programs, the armed forces implement programs at local and regional levels; wherever a military unit is performing a kind of civic action. These programs are performed by local commanders according to the directives from major commands. Coordination comes with local and regional authorities and the interested institutions. These civic action activities are performed under the following categories:

a. Educational Aspect

1. Support for literacy programs, providing transportation, and didactic material.
2. Supply and maintainance of school furniture.
3. Construction, improvement, and maintenance of classrooms, playgrounds, and bathrooms.
4. Conferences and lectures about national heroes, history, and vocational opportunities.
5. Organization of programs of useful vacations.
6. Technical training for fishermen, farmers, divers, school band players, carpenters, mechanics, etc.

b. Health and Sanitary aspects

1. Provision of drinkable water.
2. Provision of dental and medical services, and medicines at base dispensaries or by mobile teams.
3. Conferences and lectures about first aid, prophylactics, and birth control.
4. Support to the local public health authorities, with transportation and personnel for health programs and campaigns.
5. Support with labor for sanitary works.

c. General aspects

1. Promotion for practicing of sports and cultural activities, organizing competences and associations, and providing material.
2. Support with personnel and material for community works.
3. Construction and maintainance of roads, public lighting, water systems, telephone systems, and other utilities.

4. Provision of long distance communications and transportation.

B. SPECIALIZED SERVICES

The armed forces, specially in developing countries, manage and operate government owned enterprises and institutions, which most of the time are created by military initiative and are part of the armed forces structure. These enterprises or institutions, mean that some military units operate as dual function organizations, performing specific activities in order to provide specialized goods and services. These includes military goods, hydrology, meteorology, ship building, mapping, specialized maintenance, goods for both civilian use, etc. They are for provided for public, commercial, and private organizations as well as for natural persons, where and when those services are not available in the civilian world.

In a number of countries (Burma is a pertinent example) the armed forces maintain their own economic enterprises, which range from manufacturing plants to department stores. In Burma, the Defense Service Institute, which was mainly concerned with supplies for the military establishment, was expanded in 1961 to include the Burma Economic Development Corporation. Through this device, the army controls commercial concerns involved in steel production, pharmaceuticals, cement, and shipping. [Ref. 7: p. 152].

In Brasil, the Brazilian navy provides advanced ship repair facilities. In the years 1964-1967 the Rio shipyard dry dock accommodated an average of 15 million ton-days per year of which almost exactly one half was merchant class. [Ref. 14: p. 17].

In Peru, the armed forces provide specialized goods and services through public enterprises and military units working as dual function organizations. The following are the major organizations providing specialized goods and services:

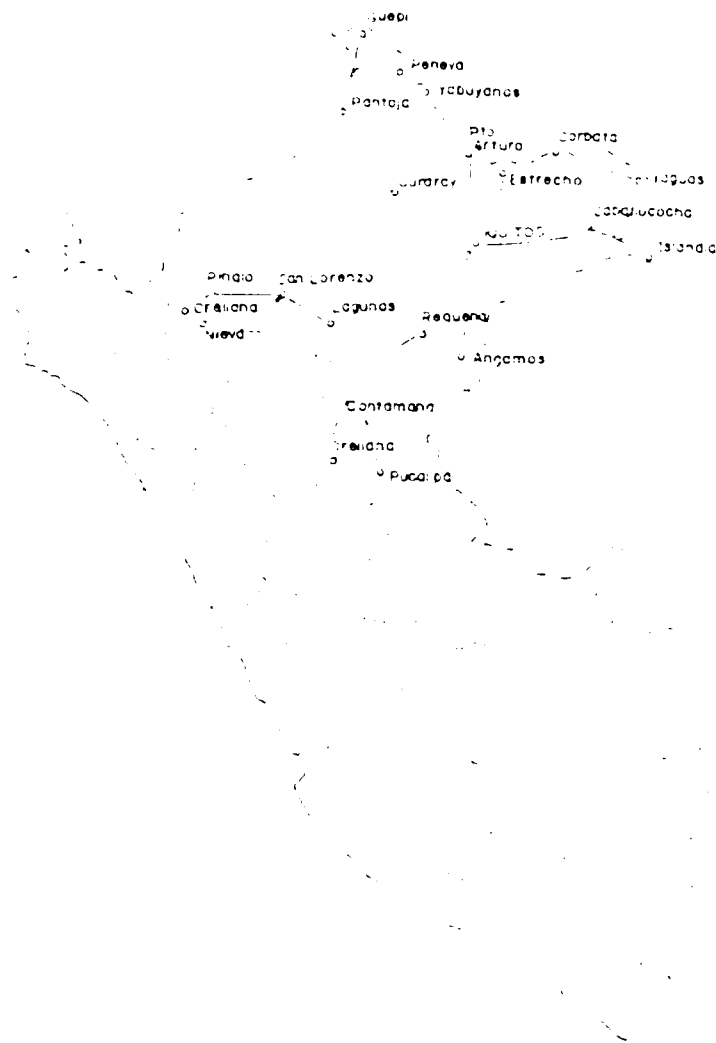


Figure 4.5 Routes Covered By The 42nd Air Group.

1. **Military Industries of Peru:** An army industrial organization made up of fabrication and assembling plants, which produces articles for military and civilian use. Its main plants are the factory of military uniforms, the factory of ammunitions, the military foundation, the pharmaceutical laboratory, the assembling plant of telecommunications equipment, fabrication of plastics, and the military tannery.
2. **The National Geographic Institute:** An army organization whose main concern is to complete the National Map. It provides cartography services for military and civilian purposes, being the official government institution for those services.
3. **The Industrial Service of the Navy:** A metals industrial organization, managed and operated by the navy, with production plants in Lima, Iquitos, and Chimbote. Its main concern is to provide shipyard maintenance, ship building, and fabrication of small arms. The main plant located in Callao, the first port of Peru, has the capability to build ships up to 45,000 tons, having built ships for the National Vessels Company, the Peruvian Oil Company, The Institute of the Sea, commercial shipping lines, and frigates for the Peruvian Navy. The arms production plant fabricates sub-machine guns of its own design, and pistols and revolvers under license of Colt (USA), and F.N. Herstal (Belgium).
4. **The Air Photographic National Service:** An organization managed and operated by the air force; its main concern is to build the Aeronautical Chart and the Topographic Map of Peru. In addition, it provides specialized services for public and private enterprises working in photographic projects for agriculture, irrigation, oil research, oceanographic research, urban and rural development, road construction, forest inventory, archaeology, tourism, etc. It also maintains the National Aerial Photographic File. It is the only agency authorized to take aerial pictures of the country.
5. **Aeronautical Industry of Peru:** An organization managed and operated by the Air Force. It was created in 1981 as an effort to promote the aeronautical industry in the country. This organization is in development and will have the capability to assemble civilian and military airplanes, and fabricate air to ground and air to air armament. Since 1983 it has been working as a service enterprise providing specialized services of depot level maintenance for civilian and military aircraft, in the national and international markets.
6. **The Institute of the Sea of Peru:** A mixed organization funded in part by the navy, working as a scientific institution for maritime and oceanographic research. The Navy participates in the managing and operation of the scientific ships of the institute taking observations of the marine life for scientific and industrial purposes. The Hydrography and Navigation Service: an organization of the navy, that plays an important role in hydrography and Oceanography. Through its hydrographic and lighthouse services, and meteorology stations provide weather and navigation services for civilian and military ships. The National Service of Meteorology and Hydrology: a organization of the Ministry of

Aeronautics managed by the Air Force. It carries out a direct program in support of public, and private organizations for air navigation, agriculture projects, energy projects, and industrial development.

7. The 3rd, 8th, and 42nd Air groups: Air Force operational units working in dual function manner. They provide air transportation services on commercial basis for public, private and commercial enterprises when this service is not available in the civilian sector due to lack of economic interest or lack of resources for the accessibility of the country. The main concerns of these units are the support of the oil companies working in the jungle, and transportation of commercial cargo.
8. The Commercial Shipping Enterprise: An organization managed and operated by the Navy to provide sea transportation on commercial basis, for public, private, and commercial enterprises.

The majority of these organizations are dual function military profitable units that are self funded and support other budgetary programs.

C. CIVIL DEFENSE AND EMERGENCY RELIEF

The armed forces play an important role in case of disasters and emergencies. They contribute to relief and rehabilitation after natural disasters and national emergencies, including provision and continuity of the basic public services when those of the civilian sector become interrupted. In the case of natural disasters and national emergencies the armed forces are one of the institutions which remain organized and have resources available to be used by the authorities. They are usually the first to get the information of the damages and the consequences in order to make a plan of action, and then to provide what is needed for relief and rehabilitation. In the case of civilian disorders or strikes the armed forces insure the continuation of the essential public services until the problems are solved. By performing these functions, the armed forces contribute to alleviate suffering of the people and help to reactivate the production activities.

Disasters occur anywhere at anytime, Hanning [Ref. 14: p. 144], states that Morocco has had its full share of

natural disasters. Most devastating were the earthquake at Agadir and the flooding in the Gharb. In both the army played a decisive part. At Agadir, some 2,000 troops were engaged in rescue and first-aid work, burial of the dead, and relief for the survivors. The operation was directed by the Army Chief of Staff.

In India, the armed forces have had an active participation in relief and rehabilitation after natural disasters, for instance in 1958, when the Jumna river altered its course and threatened the city of Delhi [Ref. 14: p. 104]. On August 17 of that year at 4:15 P.M. the Delhi Municipal Corporation requested immediate military assistance at the Wazirabad pumping station. By the that night, 200 soldiers and four bulldozers were already at work. At 2 P.M. the next day, the Army received instructions to take over the whole responsibility for ensuring the flow of water to the station. Within 48 hours, the army had dug a temporary channel and restored the water supply. The main channel was completed ten days later, and thereafter the army continued to maintain the channel until the end of October, when they handed the operation back to the Delhi Municipal Corporation.

These functions of the armed forces are not limited to the national boundaries. In 1957 the Indian Army and Air Force played an important role on the occasion of the floods in Ceylon. They carried aid, evacuated people, built roads and bridges, and established a ferry across the Galoya river to bring urgent supplies. When a devastating earthquake occurred in Peru, international aid came by any transportation means, mostly military and ships from countries such as United States, the Soviet Union, and Argentina among many others. Many foreign and Peruvian military lost their lives in action.

In that disaster 70,000 people died and many towns were destroyed, the Peruvian armed forces played an important role when the news was received, Air Force planes and Army parachutists were the first to get to the place of the tragedy. Reconnaissance planes took pictures, army engineers reconstructed roads and bridges, navy ships transported heavy equipment, air force planes and helicopters carried personnel, medicines, food, equipment, and other materials, and evacuated wounded and the sick. Similar functions were performed by the armed forces in 1982, when a deviation of the course of the El Nino current, caused climatic disorders in Peru and many countries.

The Peruvian armed forces work in coordination with the Secretary of Civil Defense of the Ministry of the Interior for relief and rehabilitation operations. For the continuity of the essential public services they operate under directives of the Joint Command of the Armed Forces, with specific tasks assigned to each military service. Water, electricity, health, communications and transportation public services are insured by the armed forces in case of disasters, civilian disorders, strikes and labor strife.

V. THE MILITARY RULE AND SOCIAL CHANGES

This role of the military has a theme of controversy. There are different views about the contribution of the military to social changes and modernization. But there are also convergences about the strategic position that the military plays in the political sphere of developing countries.

Military government has been one of the most common forms of government in developing countries. Takeovers have occurred in dissimilar societies, under very different conditions, and by different kinds of regimes. This action has caused a role expansion of the armed forces from its traditional internal and external defense function to government administrative functions. The factors that incite the military to exceed its traditional role are explained by Lissak [Ref. 16: p. 14], who says that scholars have concluded that a distinction must be made in two kind of factors:

1. Structural and functional characteristics inherent in the military social system per se that, under certain conditions, may intensify previous latent inclinations, create new ones, and thus shift the forms of activities from the specifically military domain to a more diffuse political and social sphere; and
2. Potential points of breakdown within either social or the political framework that could serve directly or indirectly as a focal point of inflammation. It could be alleged that they could be "healed" only by drastic measures which depending on the particular circumstances, the military alone could undertake.

In other words, internal characteristics of the military and special conditions of the societies are the determining factors for military interventions. Once they take the power, the armed forces are not the armed support for the government itself. Then comes the motive for the controversy. To what extent are the military agents of social change and modernization?, Are the military able to rule the country?, What will be their performance?. These questions

could be answered by analyzing the performance of various military regimes.

Pye [Ref. 5: p. 69], stated in the early 1960's that we seem to be confronted by two conflicting images of the politician in uniform. The first, derived largely from Latin America and the Balkans, is that of administrative incompetence, inaction, and authoritarianism if not reactionary values. The second and more recent is that of a dynamic and self sacrificing military leadership committed to progress and the task of modernizing national societies that have been subverted by "corrupt practices" of politicians. Implicit in this statement can be observed the conservative and modernizer concepts.

Huntington [Ref. 17: p. 32] states that there are three kind of coups: the governmental coup or palace revolution, the revolutionary coup, and the reform coup.

The governmental coup is characterized by the change of the leadership of the government, and no significant change in the social structure or in the groups participating in politics or supporting the government.

The revolutionary coup has the same initial seizure of the power, but it ushers in fundamental changes. After the coup, the efforts are oriented to social and economic changes and to alter the distribution of power within the society, by eliminating or subordinating some groups or adding or strengthening others.

The reform coup, as Huntington says, falls between the other two. A combination of military and civilian groups seizes the power intending to make reforms in the political, social and economic structure. They make reforms but do not instigate a convulsive process.

Bienen [Ref. 13: p. 10] refers to the concepts of conservatism and reformism when he states that observers of Latin American politics retained their skepticism about

the military as a modernizing force. Some continued to see the military as a corporate, self-interested group which institutionalized conservatism that inhibited economic development and social reform. Others have argued that modernization in Latin America could not be brought about by reformist militaries, but only by revolution and that regular armed forces were the principal obstacle for revolutionary changes.

Welch and Smith [Ref. 15: p. 54] consider four types of military based regimes: predatory, reformist, radical, and guardian type, to explain praetorian politics and military rule.

The predatory regime is observed in traditional societies where the military role is expanded from the defense functions to the role of guardian of domestic orders represented and dictated by the oligarchs. The military coups do not result in significant changes in the socio-economic status quo.

The reformist regime appears when changes in the society and within the armed forces have occurred. "Juntas"--a group of military leaders who seize the power and establish a military regime and rule as a group representative of the armed forces--replace the "caudillos"--military or civilian leaders that seize the power supported by the armed forces to rule the countries according to their personal interest. The reformers are concerned with creating a national identity and promoting orderly economic development and with industrialization as the means to enhance national power and hence, military power. The basis of the reform are the demands of the urban middle class and the regime is basically indifferent or hostile to social reforms.

The radical regime is characterized by the linkage of interest between military officers, who come from the middle and lower classes, and the masses. The cause of this regime

is the social revolution through profound changes in the socio-economic structures. The radical military regimes accomplish mobilization of mass support by using a body of myths, usually a mixture of nationalism and locally refined socialism.

From these definitions and concepts it could be said that the expansion of military role toward modernization and social changes depends on the conditions of the execution of the coup, and the direction and intensity of the achievement of the goals and objectives of military rulers. The first aspect is determined by the characteristic of the military and the conditions of the society, and the second aspect by the performance of the rulers after the coup.

In the history of developing countries military interventions have been different and conducted according to the specific conditions in the target country. The reasons for the military interventions are not the concern of this chapter. The performance of military rulers, and the degree of their role expansion toward modernization and social changes is our focus.

The following are examples of military interventions and regimes in Thailand, Nigeria, Burma, Indonesia, Egypt, and Peru. Analysis will explain type of intervention, characteristics, orientation and intensity of action, according to the concepts and definitions of the scholars quoted above.

1. Thailand

The history of military coups in Thailand starts in 1932, when military rule replaced rule by absolute monarchy. Since that time military dominance in politics has been active and permanent, Thailand has had fourteen coups from 1932 to 1981.

In these years of military rule, personalism, cliques, and factionalism have been characteristics of the Thai military. Except in the case of Sarit, (1957-1963

period), Chai-Anan Samudavanija [Ref. 18: p. 3], states that military leaders would seize power by staging coups but were reluctant to assume and direct political roles. Field marshall Sarit Thanarat made a in 1957 to consolidate the position of his group. In fact say Welch and Smith [Ref. 15: p. 95], Sarit contributed substantially to Thai modernization in several areas. He overhauled the the administrative structure of the government, pushed projects to develop Thailand's industrial structure, and cracked down on criminals, beggars and prostitutes.

In general, as Welch and Smith point out [Ref. 15: p. 99], the Thai military's interest in modernization is ambivalent. Apart from a continuous interest in economic growth and diversification, the Thanon group (1963-1973 period) and its predecessor ruling cliques shoed little evidence of pursuing any programmatic design for the overall modernization of the country. Fundamental social change through revolutionary education and land reform programs has not been a military goal. One explanation may be that the officers corp remains closely tied to the social and economic elites from which it is drawn.

2. Nigeria

After its independence in 1960, Nigeria has had three military regimes since 1966 to 1979; the first period was January 1966 to July 1966, the second August 1966 to July 1975, and the third from August 1975 to 1979.

After independence ethnic and regional conflicts affected the Nigerian society and the armed forces. Ideas of recession appeared. This situation became critical after the coup of 1966 led by Lt.Colonel Sowon and a civil war which occured in 1967. According to Welch and Smith [Ref. 15: p. 134], the most significant moves of the Federal Military Government since the start of the civil war are in three different areas: implementation of the twelve state

system; reintegration of the secessionist areas; and hesitant efforts to restore civilian role.

After the war, the military brought a relative political stability and some economic and administrative changes were introduced and some suggestions that the military would return to the barracks were made. Before withdrawing, state Welch and Smith [Ref. 15: p. 137-8], the Supreme Military Council first intended to preside over a nine point program of mind-boggling complexity:

1. Reorganization of the armed forces.
2. Implementation of a National Development Plan and repair of war related damage and neglect.
3. Eradication of corruption in national life.
4. Settlement of the question of the number of states.
5. Preparation and adoption of a new constitution.
6. Holding a national population census.
7. Organization of "genuinely national political parties".
8. Introduction of a new formula for allocating federal tax revenues among the states.
9. Organization of elections and installation of elected federal and state governments

With respect to economy, Akin Iwayenu in The Military and the Economy [Ref. 19: p. 63], points out that the political order created by the military facilitated rapid economic growth, and states as credits for the regime the considerable internalization of the benefits of oil resources, and the promulgation of the decrees which may change the orientation of the industry and the agriculture. Those decrees attempt to foster national economic independence and self reliance, and to remove obstacles (such as land tenure system) to large scale agriculture in the rural areas and minimize land speculation in urban areas.

Regarding administration, the local government administration reform was remarkable. In the local government and administration, states Oyeleye Oyeduai and

Alex Gboyega [Ref. 20: p. 191], that, "The reforms of 1976, as Brigadier Shelu Musa Yar Adua pointed out, were intended to stimulate democratic self government and to encourage initiative and leadership potential."

As a conclusion, no major social changes were promoted by the military regime in Nigeria, however, political, economic, and administrative credits should be attributed.

3. Burma

Many insurrections occurred in Burma before 1958 when the Burmese Army assumed the power establishing a government. After two years of rule the military restored authority to civilians. In March 1962, the army intervened again the constitution was abolished and power was assumed by The Revolutionary Council led by General Ne Win. One of the proclaimed reasons for the coup was the grave deterioration of the economic situation.

As Edward Feit points out [Ref. 21: p. 99], the military government of Burma, embodied in the Revolutionary Council, set itself four objectives:

1. The reform of the economy which has to be made more socialist;
2. The elimination of foreign influence from all aspects of the economic, political, and social life;
3. A change in the values and attitudes of the people, so that a new leadership could arise taking over the tasks of the revolution; and
4. The unification of Burma's diverse people into a cohesive nation.

All these points would be achieved in the Burmese way to socialism.

The second government of Ne Win was different in its conception of the economy. In the 1958 government, the private trade sector had priority over other sectors and the trading organization of the state were in last priority. In 1962 the main concern was to nationalize the economic resources and services, except indigenous petty trade, manufacture and agriculture. Moshe Lissak [Ref. 16: p. 215],

states that in 1963, the Revolutionary Council announced the nationalization of marketing of rice, of all import and export trade, and of private banks and industries. The Burma Economic Corporation and its thirty nine subsidiary companies were also transformed to government departments. In 1964, all Indian and Chinese businessmen were driven out. In planning, the greatest emphasis was on increased capital investment for development for the public sector.

In the education field, Rangoon University was reformed to achieve objectives according to the Burmese way of socialism, to have specialists in socio economic fields inspired toward socialism to change the education curricula, especially in history, economics, and philosophy, and to adopt the Burmese language for teaching and instruction. In agriculture, the tenancy rent for the peasants was abolished.

In general, the reforms were nearly all oriented to the economic aspects of socialism, primarily based on nationalization and industrial development.

4. Indonesia

There had been a National Struggle in Indonesia from its independence in 1945 until 1966, when General Soeharto established the New Order. The political participation of the Indonesian armed forces comes from the days of the war for the independence and became a national tradition, officialized as the socio-political function of the Indonesian armed forces. This function together with its military function is known as the Dual Function of the Indonesian armed forces.

The armed forces constitute one of the primary socio political forces of the country, and participate in the total national life together with the other three: the Moslim Party (PPP), the Secular Party (PDI), and the

Functional Groups. Members of the armed forces are put in the people's Consultive Assembly, in the Parliament, and in the Judiciary. They represent the armed forces in non-defense related functions.

The professed position of the Indonesian armed forces is to be an integrating force. Brigadier General Nugroho Notosusanto [Ref. 22: p. 86], explains what can be called the political ideology of the armed forces in what are officially called the "values of 45". These "values of 45" are mainly:

1. Independence as expressed by the Proclamation of Independence of August 17, 1945.
2. The principles and ideals contained in the Preamble of the Constitution of August 18, 1945; particularly the five principles of the Pancasila, namely:
 - a. Believe in the one God.
 - b. A just and civilized humanity.
 - c. Indonesian Unity.
 - d. "Populism" guided by wisdom in consultation and representation.
 - e. Social justice for the whole Indonesian people.

The role of the armed forces in the Indonesian society is made official under the name of the Dual Function, and it is performed through the "functionals", the armed forces members performing non-defense functions outside the Department of Defense, who participate actively in the socio-economic life of the country.

Quoting to Janowitz, General Notosusanto [Ref. 22: p. 90], states that the Indonesian armed forces belong to the fourth category, namely civil-military coalition. The military serves as an active political bloc in its support of civilian parties and other bureaucratic groups. It participates actively in national life and feels responsible for success or failure in national development.

5. Egypt

The Egyptian army had no active participation in politics until 1952. That year a new group of officers dismissed the king, eradicated the monarchy, and began a process of change in all major aspects of social life in Egypt. This group of officers was called "The Free Officers Group", and later they titled themselves the Revolutionary Command Council led first by General Naguib and later by Lt. Colonel Nasser until his death in 1971.

The action of the military regime was performed through well defined stages; Edward Feit [Ref. 21: p. 144], states that according to Amar Abdel Malek the Egyptian military regime can be divided into three stages. The first stage from 1952 to 1956, was aimed at modifying the power structure to lay the groundwork for industrialization. The second stage began with the Suez crisis of 1956 and lasted until 1961. The third stage began with the nationalization laws of 1961 and lasted through 1967 (the date given by Abdel Malek), up to present day.

The major actions and reforms of the military regime were evident in the following fields:

a. Politics and Administration

- (1) The monarchy was abolished
- (2) The National Charter was promulgated in 1962, which established the basis of authority and guidance for the new constitution. It showed a change in orientation from the national goals of the original revolution and emphasized that Egypt was an Arab Nation based in Islamic principles.
- (3) The political parties were abolished, and new parties were created to support the regime and organize the participation of the people. In 1952 The Liberation Rally was created, in 1957 The National Union, and in 1962 The Arab Socialist Union.

b. Agriculture

- (1) The Agrarian Reform of 1952 provided for the confiscation of landholding in excess of 200 feddans (approx 200 acres), and the sale of land to peasants in favorable terms. In 1961 the landholding limit was reduced to 100 feddans and later in the 1962-1964 period, decrees were promulgated which confiscated the properties of certain landowners and expropriated foreign held property. Finally in 1969 the individual landholding was reduced to 50 feddans.

(2) The construction of the Aswan High Dam was opened in 1971 for irrigation, power, and industrial purposes. By 1970, 827,000 feddans had been redistributed among 150,000 families.

c. Economy

- (1) Labor legislation increased minimum wages, reduced the working hours, created new jobs, and established a profit sharing scheme that compelled the firms to distribute 25% of net profits among workers.
- (2) The socialist economic system was emphasized.
- (3) The Permanent Council for National Production was created to study and implement development projects in commerce, agriculture, electricity, industry and transport for three years. In 1955 the National Planning Committee was created to draft a National Compulsive Plan for social economic development.
- (4) In 1960 the Five Years Plan was promulgated to increase the national income to 40% in that period and double it in ten years.
- (5) In 1957 the Suez Canal Company and the French and British assets were nationalized.
- (6) There was an aggressive nationalization program. By 1963 public ownership had expanded to all financial institutions, public utilities, transport, department stores, big hotels, and industries of significant size. In addition, the state controlled the import and export trade, and marketing of agriculture crops.

d. International Policy

- (1) A non-alignment position was proclaimed.
- (2) The Suez Canal question was solved in 1956, the British withdrew in accord of the agreement of 1954.
- (3) A Panarab policy was articulated, creating the United Arab Republic composed of Egypt, Syria and Sudan.
- (4) Relations with the Soviet Union improved and with the United States deteriorated. The regime decided to purchase arms from the communist block countries. In 1971, Sadat improved relations with United States and expelled Soviet advisers. Arms were purchased from the United States.

e. Education and Social Services

- (1) The Council for Public Services was created in 1953. its task was planning and implementing projects for education, health, and social services.
- (2) Since 1952 free education was expanded, and in 1962 the graduates had the right to hold a job in the public sector.
- (3) Birth control policies were established, and a National Family Planning Program was introduced.
- (4) Rent controls were established and the government undertook construction of housing for low income workers.

The performance of the Egyptian military and their role expansion is summarized by Benoit [Ref. 11: p. 258].

Since 1952 Egypt has undergone a basic transformation involving agrarian reform, nationalization of industry, a much higher level of taxation, a great expansion of industry, the expropriation of foreign interests, and a vast extension of social services and education. All these have profoundly altered the Egyptian economy and social order.

6. Peru

During 165 years of independent life there have been many military coups in Peru. The main characteristics of those coups were the personalism or "caudillismo". Military or civilian leaders seized power to rule the country according to personal style and interest, aided by the conservatism of the armed forces. Those movements, promoted and headed by "caudillos", did not change the socio-economic structures of the country. The military continued supporting the oligarchy and the forces of traditional power. The coup of 1962 was the first manifestation of corporate coups. The Junta members called it "an institutional movement". In October, 1968, a coup led by General Velasco seized power from president Belaunde and proclaimed The Revolutionary Government of the Armed Forces. The rules, goals and objectives were established in three basic documents: 1. The Manifesto which mentioned the situation and, in a general way, the goals of transforming the Peruvian society in its social, economic and cultural aspects. It further referred to restoring the principle of authority, respect for law, and the supremacy of justice and morality. 2. The Revolutionary Statute which cited the composition and attributes of the junta, and 3. The Inca Plan which established an analysis of national problems, the objectives of reforms, and actions to correct the problems.

There were two phases military rule : Phase I (1968-1975), and Phase II (1975-1980). The first was led by General Velasco, and the second by General Morales Bermudez who seized power from the former leader.

The main actions and reforms of the regimes were in the following fields:

7. International Policy

- (a) A non-communist and non-capitalist policy was proclaimed.
- (b) In 1969, diplomatic relations were established with the Soviet Union and the communist bloc countries; later, in 1971 with China and Albania.
- (c) The policy of the 200 miles of territorial sea was defended in the international context.
- (d) The military U.S. mission was removed and the Rockefeller mission was not accepted, in response to the invoking of the Pelly amendment.
- (e) Active and aggressive participation in world, third world, and regional organizations was enacted, showing a position of independence and non-alignment.
- (f) Commercial trade with communist countries and Japan was emphasized.
- (g) Soviet armament was purchased to diversify the sources of supply.

8. Administration and Politics

- (a) The executive branch was reorganized.
- (b) The National Agrarian Society (organization of the landowners) was dissolved, and The Agrarian National Confederation was created.
- (c) The National Industries Society was forbidden to represent itself as national.
- (d) The National System of Social Mobilization was created to promote the political participation of the masses, serving as a link between government and people, helping bureaucracies to be more responsive to the public and helping the population to express its desires to the government.
- (e) The Committee of Advisors to the President was created, which main role was to initiate and staff out reforms and comment on the legislative drafts from the ministries.
- (f) The state assumed control of mass communication media and the press was nationalized. The newspapers were adjudicated to different institutions and organizations of the society.
- (g) The new constitution was promulgated in 1979. It was drawn by the Constituent Assembly elected in that year.

9. Agriculture

- (a) The Agrarian Reform Law established maximum individual landholding limits of 150 hectares (2.471 acres = 1 hect.) in the costa, 50 in the Sierra, and 1500 hectares for grazing lands. The law required the owners to live in the property, and workers to participate in the profits.
- (b) The huge coastal sugar plantation of W.R. Grace and 260,000 hectares of agricultural holdings of the Cerro de Pasco corporation were expropriated.
- (c) Big estates called haciendas were expropriated and the owners paid with public bonds and lesser cash.
- (d) The expropriated estates were converted to Agrarian Production Cooperatives which were indivisible units of land, buildings and facilities under common administration of their members and to Agricultural Societies of Social Interest which consisted of expropriated land and peasant communities.
- (e) The 1969 law abolished all private water rights and gave the state the ownership and control of water resources.
- (f) All forms of rent were abolished and the exchange of personal services for the use of land was discontinued.
- (g) The Poechos Dam and The Majes Project were implemented to improve the quality of soil and to extend the agricultural land.

By 1980, 9 million hectares had been expropriated with 8.8 million adjudicated to 379,000 families. In addition 2.9 million hectares reverted to state ownership, and 10,706 families in the Selva had received 1.1 million hectares.

10. Economy

- (a) The economic system was changed to a mixed economy system.
- (b) There were established four forms of property: social, state, reformed private, and fully private.
- (c) The Central Bank of Reserve was nationalized, and the private banks were peruvianized.
- (d) The International Petroleum Company, the Cerro de Pasco Mining Corporation, and the Marcona Mining Corporation were all nationalized.
- (e) The communications systems and public utilities were nationalized.
- (f) The basic industries and public resources were reserved for public enterprises, and new rules of foreign investment in non-basic sectors were established.

- (g) The fishing industry was nationalized and the trade of fishing products was assumed by the public enterprise.
- (h) The public sector became the main source of investment and exercised strong control over investment and development outside of public sector. By 1975 state enterprises were in charge of all fish meal, the bulk of mining and metal refining, all petroleum refining and marketing, steel, cement and fertilizer production, all public utilities and rail system, and had a large share in banking and insurance.
- (i) The industrial reform established the working communities and the workers share in management and profits.

11. Education and Social Services

- (a) The educational system was reorganized; preschool and scholastic (including adults) education commonality and terminal secondary education with vocational orientation were stressed.
- (b) Education in their own language was established for Quechua and Aymara speakers (Peruvian Indian languages)
- (c) The unique uniform was created to be worn by all students from private and public schools.
- (d) The social security services were improved and expanded for independent workers and house maids. The name for the last was changed to "home employees".
- (e) The government supported the improvement of living conditions in the squatter settlements called barriadas. These barriadas provided a setting for a low income population, where residents constructed houses in large measure by themselves. The name barriadas was changed to "young towns" (pueblos jovenes). The National Organization for the Development of Young Towns and later the System for Social Mobilization were in charge of providing public services and land title for the residents.

After Phase II of the military regime some reforms were corrected and some goals were not achieved, but as Lowenthal says [Ref. 23: p. 419]. "If we define the Peruvian experiment as the core program of nationalistic affirmation, economic modernization, antioligarchical reform, and systematic state building supported by the armed forces in 1968, the agenda was implemented to an impressive degree."

Peru of the 1980's is not Peru as it was before 1968, points out Lowenthal [Ref. 23: p. 425]. What has changed most in Peru is the structure and distribution of

power. The traditional landed families and their financial institutions have lost most of their influence. Most of the former oligarchs have fallen from unquestioned authority to oblivion. The Catholic church, once very prominent, is barely visible, and the presence and influence of the United States has been sharply reduced.

After touching other aspects, Lowenthal concludes [Ref. 23: p. 429]. "Finally and interrelated with all other trends, Peru's value structure has changed significantly, at least in part as a result of the military experiment. This point is hard to document but those familiar with Peru recognize the change: the kind of people who attend the Cine Pacifico in Miraflores (an aristocratic district of Lima); the looks exchanged between Peruvians of different classes; the attitudes felt toward foreigners and toward highland indians; the assumption about the possibility of social mobility in Peru; attitudes and practices in male-female relations; educational concepts and procedures; the recognition of Quechua as an official language, and so on. These changes in values and expectations, though intangibles, will have powerful consequences.

VI. ANALYSIS

The functions performed by the armed forces will be analyzed in three aspects: the natural role, the direct social and economic functions, and the rule of the country by military governments. This forms the basis for the general conclusions about the contribution of the Peruvian Armed Forces to the social and economic development of Peru. Figure 6 is a summary of the analysis of political involvement by the military in developing countries.

Some concepts of modernization will be used to frame and have a reference for the performance of the Peruvian armed forces as agencies of modernization and social change.

Whynes, when quoting to Kilson [Ref. 3: p. 167], states that modernization refers to those social relationships and economic and technological activities that move a social system away from a traditional state of affairs in which there is little or no social mobilization among its members.

Huntington [Ref. 17: p. 160], points out that the modernization which Kilson has emphasized involves social mobilization, and this complex process of social changes is significantly correlated with major changes in politics.

Shils [Ref. 1: pp. 10-11], points out that to the elite of the new states modernity entails the dethronement of the rich and the traditionally privileged; and that it involves breaking up large private states, especially those owned by absentee landlords. Later, he remarks the economic aspect saying that no country can aspire to modernity and ignore the economic improvement.

These concepts of modernization include the key points considered within the three aspects of the role played by the Peruvian Armed Forces in Peru developed in this study.

THE ACTION	CONSEQUENCE	REPRESENTATIVE COUNTRIES
Revolutionary or Radical: Fundamental changes, redistribution of power, land. Linkage to the masses by new leadership	Lasting change in power structure, value hierarchies, land reform, leadership, literacy. Often results in mixture of nationalism and local socialism	Egypt 1952 - Present Peru 1968 - 1980 Argentina 1970's
Return Coup Combination of military and civilian. More moderate. Middle class main mover linked with military	Changes more moderate, better planned. Strong attempts to modernize government procedures	Nigeria 1966 - Present Ghana 1966 - Present Iran 1979 - 1980
"Palace Coup" or conservative	Change in leadership, no change in structure. Often leads to counter revolutions	Bolivia Thailand All Latin American Countries 1930 on
Guardian Type	Military involved in all activities of government i.e. parliament, commerce, transportation	Indonesia 1966 - Present Iran 1980 - Present

Figure 6.1 Summary of Political Actions
in Developing Countries.

A. THE NATURAL ROLE OF THE ARMED FORCES

In this role the military makes an impact on society by affecting manpower and employment, education and training, modernization and social change, and regional development.

About manpower and employment Gutteridge [Ref. 4: p. 75], when referring to a study of a developing country, states that a soldier's life is regarded as providing steady employment in a society in which it is not easily obtained. Benoit [Ref. 11: p. 17], points out that defense programs directly contribute various useful inputs into LDC economies, particularly manpower training which may considerably improve the productivity of military manpower after demobilization.

In manpower and employment, the armed forces absorb a portion of the population providing people a source of employment to satisfy their vocational or occupational needs. The manpower of the armed forces represents an equal number of job positions within the society. This point is extremely important in developing countries where unemployment rates are high and jobs are insecure due to the economic situation. The armed forces provide secure and permanent job positions, and the potential use of qualified personnel for civilian occupations after release or retirement. The Peruvian Armed Forces contribute to the social and economic development of Peru through their recruitment programs for Officers, NCO's, Conscripts and Volunteers, and Civilian positions.

With respect to education and training, Janowitz [Ref. 7: p. 157], points out that there can be no doubt that the military has the capacity for education in fundamental literacy and in aspects of citizenship training. Daaner [Ref. 12: p. 19], says that, a modern military establishment requires the support of an infinite number of skills, and that such skills have a civilian just as much as a military

importance and many exgraduates of special military colleges return to use their acquired skills in civilian employment.

In education and training aspects, all these people absorbed by the armed forces are educated and trained. Officers, NCO's, enlisted, and civilians are given general and specialized courses to qualify into specific functions, converting the military services as education and training centers available for the population. Education and training are the basis for scientific knowledge and specialization.

The Peruvian Armed Forces perform these functions in a daily basis on their Officer Academies, NCO Schools, Enlisted Programs, Postgraduate and Specialized Training Centers and War Colleges, and in Civilian and Foreign Institutions, as well as on the field.

About modernization and social change, Shils, when referring to parochialism, nationality and nationalism, states that the military can serve to integrate diverse ethnic groups into a national community. It can teach skills useful in economic development, it can widen horizons beyond village and locality; it can keep young men from being infected by nationalistic demagoguery and give them a greater concern for a nation as a whole.

In modernization and social change the armed forces integrate people from different races, languages, regions, and customs making them think as Peruvians. Military installations reinforce the nationhood and integrate the nation people who have come from isolated and scattered populations in the hinterland. This nation building function could hardly be performed by institutions other than the armed forces, especially in the countries where the economic resources are scarce.

The Peruvian Armed Forces in this function integrate people of the Costa, Sierra and Selva in their Officers, NCO's, Troop and Civilian corps. The military establishments

help to develop and integrate isolated regions. The military presence means security and reinforcement of nationhood. Geography is a determinant factor in this function of the armed forces. The territory is divided in three natural regions having each one different climate, terrain, and ethnic groups. This cause isolation of some regions, difficulty for transportation and communications, lack of trust among people, regionalism and lack of integration.

With respect to regional development, Daaler [Ref. 12: p. 18], states that the strategic location of military settlements may, unintentionally, help to develop neglected outlying areas. Whynes, [Ref. 3: p. 50], points out that, "A military establishment does not exist or operate in isolation. Feedback between itself and the surrounding economic environment will occur, and a mutual relationship can be established based upon supply and demand."

In regional development there is a monitoring system which controls the supply and demand of goods and services exchanged between civilian populations and military installations. In different regions of the country the military promote incentives and social development, especially in isolated regions where few or no public service are available. In the process of this interaction the armed forces require goods and services which are supplied by the civilian populations, and supply services required for the civilian populations, activating the economic process and the social activity.

For the accomplishment of these functions the armed forces do not require additional resources. The natural role is an effect of the accomplishment of their primary mission. Social and economic benefits are obtained from the strictly military activity.

B. DIRECT SOCIAL AND ECONOMIC FUNCTIONS

To explain civic action, Whynes [Ref. 3: p. 125], states that, "We take the term "civic action" to describe cases where the military provides deliberate benefits to the civilian economy by acting in a non-military manner". Hanning [Ref. 14: p. xvii], points out that, "There are skills required in modern military structures that are capable of being used for non-military purposes, skills that in some areas of the world are in short supply."

The military has direct input through its civic action programs, the provision of specialized services, and the civil defense and emergency programs.

In implementing civic action programs, the armed forces are involved in social and economic functions providing public services oriented to support development programs by performing non-military functions using military resources. Those services can not be provided by government or public agencies due to limited budgeting funds or lack of specialization, or by private and commercial enterprises due to the lack of economic interest or adequate resources.

In this field the Peruvian Armed Forces play an active role by implementing national and regional or local programs, in support of development projects and various community activities.

About specialized services, Benoit [Ref. 11: p. 17], when referring to the favorable effects of defense spending on growth, states that the work done by the military in specialized activities such as mapping, hydrological, meteorological, and other R&D is more important than the work done by civilian agencies in these fields.

The specialized services are provided to support development programs of the government, as well as to support different activities of the private sector when those services are not available in the civilian sphere. In

performing these functions, most of the time military organizations are the only providers due to government policies or the complexity and high cost of the activities that discourage private investment.

The Peruvian Armed Forces perform specialized activities to provide these services in support of public and private sectors for development and investment projects. The services provided are not available in the civilian world. Military organizations operate in a dual function manner using their own resources or operating and managing public enterprises in areas such as Hydrology, Meteorology, Shipbuilding, Aerial Photography, Oceanography, Mapping, and Transportation.

About the capacities and performance of the armed forces in civil defense and emergency relief, Janowitz [Ref. 7: p. 153] states that the armed forces have special capacities to assist in relief and economic rehabilitation after major national disasters, floods, earthquakes, etc. Benoit [Ref. 7: p. 17], states that the military contribution to civilian relief and rehabilitation after natural disasters may be quite important in LDC's.

The emergency and civil defense functions are performed by the armed forces in case of natural disaster, social conflict and war. The armed forces are among the few institutions that remain organized and disciplined when chaos affects societies. Sometimes they are the first or the only tool available to be used immediately to provide relief and to rehabilitate, and then to establish the basis for the reconstruction of the affected regions and the re-establishment of the economic life. Very often they restore and assure the continuity of the essential public services for the population in cases of civil disorder and strikes.

In Peru, the armed forces play an important role in this field. Due to the position of the country, i.e., an earthquake area, and the climate conditions, earthquakes, avalanches of mud, and floods continuously threaten the population. The earthquake of 1970 and the floods of 1982 made evident the performance of the Peruvian armed forces.

In the emergency aspect the armed forces are prepared to insure the continuity of the essential public services for the population in case of civilian disorder, strikes and strife.

For these direct social and economic functions the armed forces do not require additional resources since they use their military resources to achieve civilian goals.

C. MILITARY RULE AND SOCIAL CHANGE

This role is played in different degree which depends on the characteristics of the military institutions and the conditions existing in the society. If the military are conservative their rule will be conservative and respectful for the status quo. If the military have modernizing ideas their rule might be oriented to introduce reforms into the social, political, and economic structures of the society. These reforms could be made in a wide range of depth going from superficial reforms to profound changes or revolutions.

Welch and Smith [Ref. 15: p. 144], consider the Peruvian military of 1968 among the radical military regimes concerned with changing societies, they state that the Velasco regime, instead of upholding the status quo and hence the interests of the the oligarchy, proclaimed itself as the vanguard of the social the social revolution. Lowenthal [Ref. 23: p. 459], points out that if we define the Peruvian experiment as the core program of nationalistic affirmation, economic modernization, anti- oligarchical reform, and systematic state building supported by the armed forces in 1968, the agenda was implemented to an impressive degree.

The military regime of 1968 introduced profound reforms to change the structure of the Peruvian Society. A radical agrarian reform, the reform of the economic system, the industrial reform, and the proclamation of an independent non-capitalist and non-communist position are evidence of their performance.

Having the concepts of modernization as frame and reference, and considering that modernization implies social change and social mobilization, it could be said that the performance of the Peruvian Armed Forces has been most productive. In their natural role, in performing direct social and economic functions, and ruling the country during the military regime of 1968, they performed functions, and developed relationships that contribute to modernization and development. Therefore, they can be considered agencies of social change and modernization.

VII. CONCLUSION

The question to be answered is, "To what extent are the Peruvian armed forces modernizing and acting as social change agents?" This may be answered by observing the performance of the armed forces in their natural role, direct social and economic functions, and when ruling the country by military government.

In the three aspects that have been analyzed, the undertaking of the Peruvian Armed Forces has had a positive effect on the social and economic development of the country.

In addition to their primary mission, the armed forces have a second mission given by the Constitution which is to participate in the social and economic development of the country and in civil defense.

In addition, due to causes that are not a subject of this work, the armed forces have had the opportunity for ruling the country, especially during the 1968-1980 regime when social and economic reforms were introduced.

In the accomplishment of their primary mission, the Peruvian armed forces play a natural role as is likely played by almost all the armed forces of the world. The defense services are natural institutions for education and training, and are natural sources of employment. The strategic location of military bases and installations promote and motivate the reinforcement of nationhood, regional development, and the integration of the hinterland to the social and economic life of the country. In addition, the military presence represents law, order, justice, and national values and symbols.

In the accomplishment of their secondary mission, the Peruvian armed forces participate actively and contribute

directly to the development of the country by performing non-military functions or dual functions.

The Peruvian Navy, Army, and Air Force are involved actively in major or national and regional or local civic action programs. The major programs include the road construction projects and the rural settlement projects executed by the Army, the Amazon basin riverine program executed by the Navy, and the air transportation program executed by the Air Force. Civic action operations are performed on a day to day basis, and the presence of the soldiers is in permanent close interaction with the civilian population. In the same way the interaction with public, private, and commercial enterprises and the common people is made permanent through the provision of specialized services in support of development and investment projects or the daily activities of the social and economic structures. The armed forces provide services in areas such as Meteorology, Hydrology, Oceanography, Cartography, Mapping, Shipbuilding, Specialized high level maintenance, Aerial Photography, Air and Sea transportation, and Navigation, which are required for public, industrial, commercial, and personal purposes.

The performance of the Peruvian armed forces in emergency and civil defense functions is well known. Their contribution during the earthquake of 1970, the floods of 1982, and the avalanches of mud during summer season every year are the best examples of this role of the armed forces.

In performing these direct social and economic functions, the Peruvian armed forces use their defense resources to meet civilian goals. Among the military units performing dual functions, some are profitable, self funded units that contribute support to other budget programs, resulting in a double economic benefit.

Finally, in the military rule aspect, the armed forces changed their conservative position and introduced

significant social and economic changes during the military regime of the 1968- 1980 period. They were able to do so because of their better knowledge of the problems of the Peruvian society and the national reality.

The natural role of the Peruvian armed forces and their active and permanent involvement in direct social and economic functions, as well as the reforms made during the 1968-1980 military regime and its consequences, demonstrate a substantial contribution to the social and economic development of the country. Other institutions within the Peruvian society hardly could have achieved the same results.

Institutions that contribute to the social and economic development of their countries in addition to their primary mission, and promote changes by introducing reforms in the social structure should be considered modernizing and social change agents.

LIST OF REFERENCES

1. Shils, E. and others, The Role of the Military in Developing Countries, The Rand Corporation, 1964.
2. Kennedy, G., The Military in the Third World, Charles Scribner's Sons, 1974.
3. Whynes, D. K., The Economics of the Third World Military Expenditure, University of Texas Press, 1979.
4. Gutteridge, W., Military Institutions and Power in the New States, Frederick A. Praeger Publishers, 1965.
5. Pye, L. and others, The Role of the Military in Developing Countries, The Rand Corporation, 1964.
6. Berger, M., Military Elite and Social Change, Center of International Studies, 1960.
7. Janowitz, M., Military Institutions and Coercion in the Developing Nations, The University of Chicago Press, 1977.
8. Stepan, A. and others, Armies and Politics in Latin America, Holmes and Meyers Publishers, Inc., 1976.
9. Keefe, E. K. and others, Peru: A Country Study, Department of the Army, 1981.
10. Constituent Assembly of 1979, Constitucion Politica del Peru, Peruvian Air Force Press, 1979.
11. Benoit, E., Defense and Economics Growth in Developing Countries, Lexington Books D. C. Heath and Company, 1973.
12. Daalder, H., The Role of the Military in the Emerging Countries, Moutonand Co., 1962.
13. Bienen, H. and others, The Military and Modernization, Aldin Atherton, 1971.
14. Hanning, H., The Peaceful Use of the Military Forces, Frederick A. Praeger Publishers, 1967.
15. Welch, C. E. and Smith, A. K., Military Role and Rule, Duxbury Press, 1974.

16. Lissak, M., Military Roles in Modernization, SAGE Publishers, 1976.
17. Huntington, S. and others, Changing Patterns of Military Politics, The Free Press Glencoe, Inc., 1962.
18. Chai-Anan Samudavanija, The Thai Young Turks, Institute of Southeast Asian Studies, 1982.
19. Akin, Iwayenu and others, The Military and Economy in Nigerian Government and Politics under Military Rule, St. Martin's Press, 1979.
20. Oyeleye, O. and Gboyega, A., and others, Nigerian Government, an Politics under Military Rule 1966-1979, St. Martin's Press, 1979.
21. Feit, E., The Armed Bureaucrats, Houghton Mifflin Company, 1973.
22. Nogroho Nostosusanto, The National Struggle and The Armed Forces in Indonesia, Department of Defense and Security of Indonesia, 1980.
23. Lowenthal, A., The Peruvian Experiment Reconsidered, Princeton University Press, 1983.

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